

Remarks

Restriction Requirement

In the above-identified Office Action, the examiner has issued a restriction requirement and requires election of one of the following groups under 35 U.S.C. § 121:

- Group I: Claims 1-4, 7-14, drawn to isolated polynucleotide comprising codon-optimized nucleotide sequence of SEQ ID NO: 1 encoding bacterial LuxA protein, expression cassette, and host cell, classified in class 435, subclass 252.3.
- Group II: Claims 1-2, 5-6, 7-12, 15-18, drawn to isolated polynucleotide comprising codon-optimized nucleotide sequence of SEQ ID NO: 2 encoding bacterial LuxB protein, expression cassette, and host cell, classified in class 435, subclass 252.3.
- Group III: Claims 19-22, 25-26, drawn to a method of introducing nucleic acid encoding LuxA protein, classified in class 435, subclass 6.
- Group IV: Claims 19-20, 23-26, drawn to a method of introducing nucleic acid encoding LuxB protein, classified in class 435, subclass 6.
- Group V: Claims 27-28, 30, drawn to a method of making nucleic acid comprising nucleic acid encoding LuxA protein and codon substitution to produce higher level of LuxA protein, classified in class 435, subclass 6.
- Group VI: Claims 27, 29-30, drawn to a method of making nucleic acid comprising nucleic acid encoding LuxB protein and codon substitution to produce higher level of LuxB protein, classified in class 435, subclass 6.
- Group VII: Claims 31-33, drawn to a kit analyzing gene expression of LuxA protein, classified in class 435, subclass 6.
- Group VIII: Claims 31-33, drawn to a kit analyzing gene expression of LuxB protein, classified in class 435, subclass 6.

Applicants hereby elect **without traverse** Group I (Claims 1-4, and 7-14), drawn to isolated polynucleotide comprising codon-optimized nucleotide sequence of SEQ ID NO: 1

WPB:177570:1

encoding bacterial LuxA protein, expression cassette, and host cell, classified in class 435, subclass 252.3.

Species Election

In the Office Action, the examiner has also issued a species election requirement.

The examiner required an election of LuxA or LuxB having only one of the following codon substitutions:

TTT to TTC
TTA, CTA, TTG and CTT to CTG or CTC
ATT and ATA to ATC
GTT and GTA to GTG or GTC
TCT, TCA, and TCG to TCC
CCA and CCG to CCC or CCT
ACT, ACA and ACG to ACC
GCA and GCG to GCT or GCC
TAT to TAC
CAT to CAC
CAA to CAG
AAT to AAC
AAA to AAG
GAT to GAC
GAA to GAG
TGT to TGC
CGT and CGA to CGC, CGG and AGA
AGT to AGC
GGT and GGA to GGC or GGG

Applicants elect with traverse codon substitution TTA, CTA, TTG and CTT to CTG or CTC for LuxA. The species election requirement is traversed because a search for the species recited in elected Group I would not be unduly burdensome. 37 CFR 1.141 specifically states that "more than one species of an invention, not to exceed a reasonable number, may be specifically claimed in different claims in one national application, provided the application also includes an allowable claim generic to all the claimed species and all the claims to species in

WPB:240098:1


excess of one are written in dependent form or otherwise include all the limitations of the generic claim." The present application does contain claims generic to all the claimed species and all the claims to species in excess of one are written in dependent form.

Accordingly, reconsideration and withdrawal of the outstanding species election under 35 U.S.C. §121 is respectfully requested.

The examiner is cordially invited to call the undersigned if clarification is needed on any matter within this response, or if the examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

Date: April 6, 2006


Stanley A. Kim, Ph.D., Esq.
Registration No. 42,730
RUDEN McCLOSKEY, SMITH,
SCHUSTER & RUSSELL, P.A.
222 Lakeview Avenue
Suite 800
West Palm Beach, FL 33401-6112
Telephone: (561) 838-4512

Docket No. 6704-30